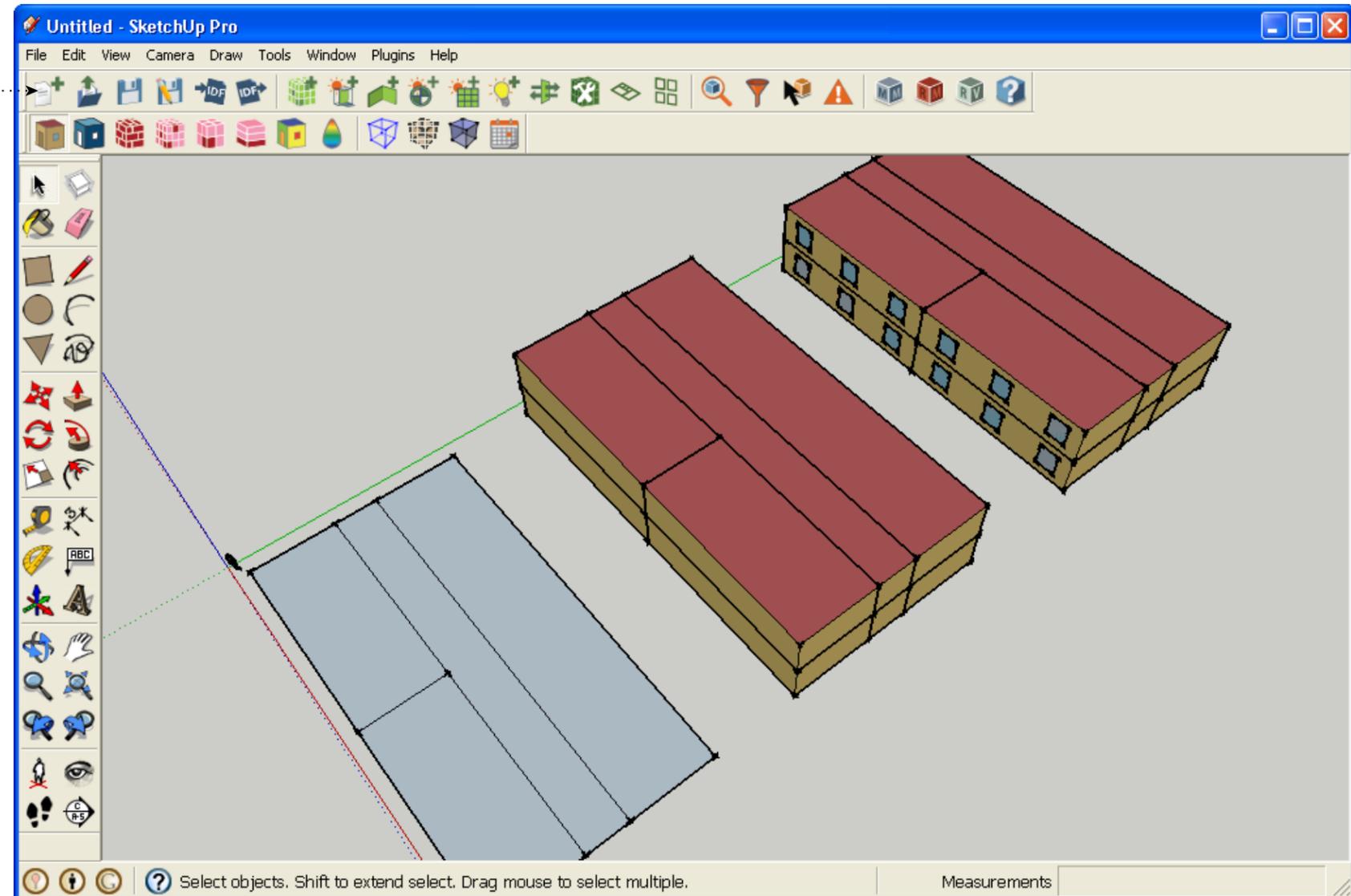
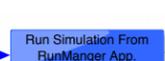
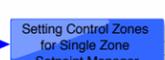
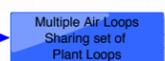
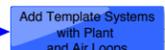
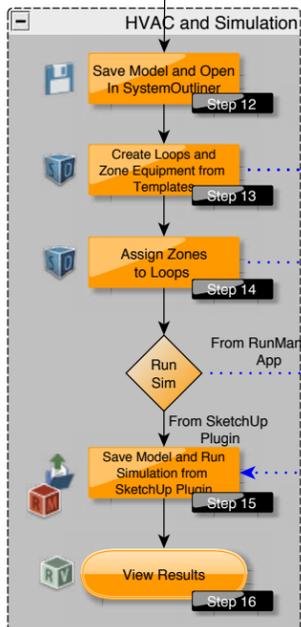
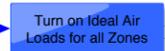
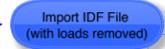
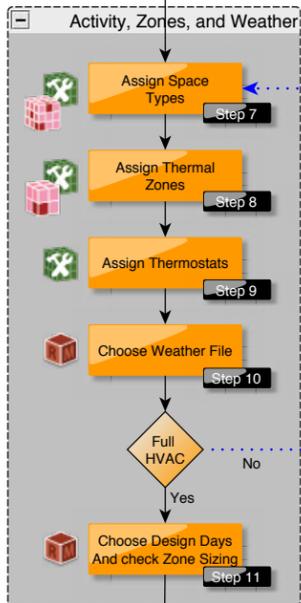
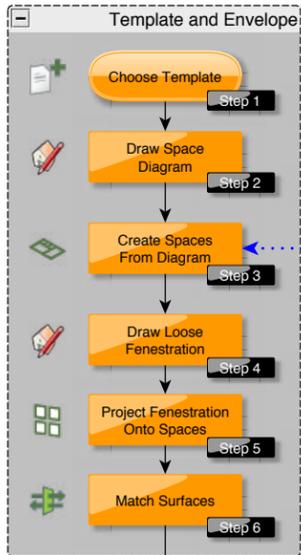


Choose Template | **STEP 1 of 16**

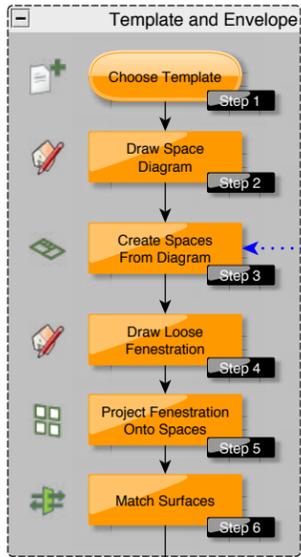


View all SketchUp keys at once

View all SystemOutliner keys at once

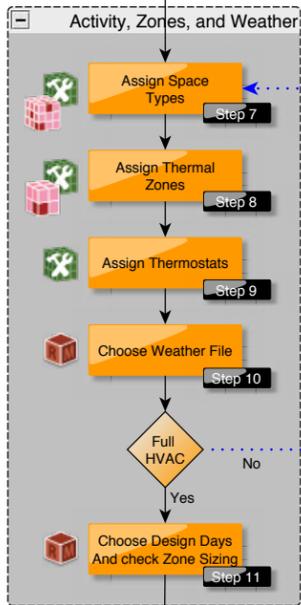
Watch Online Training Video for Step 1

Draw Space Diagram | **STEP 2 of 16**

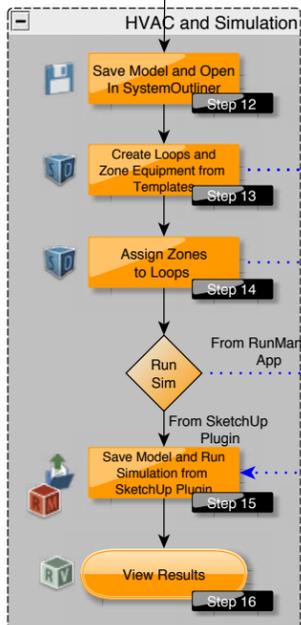


Model from Photographs

Import From Cad File



Import IDF File (with loads removed)



Turn on Ideal Air Loads for all Zones

Add Template Systems with Plant and Air Loops

Multiple Air Loops Sharing set of Plant Loops

Zone Equipment vs. Air Loops

Setting Control Zones for Single Zone Setpoint Manager

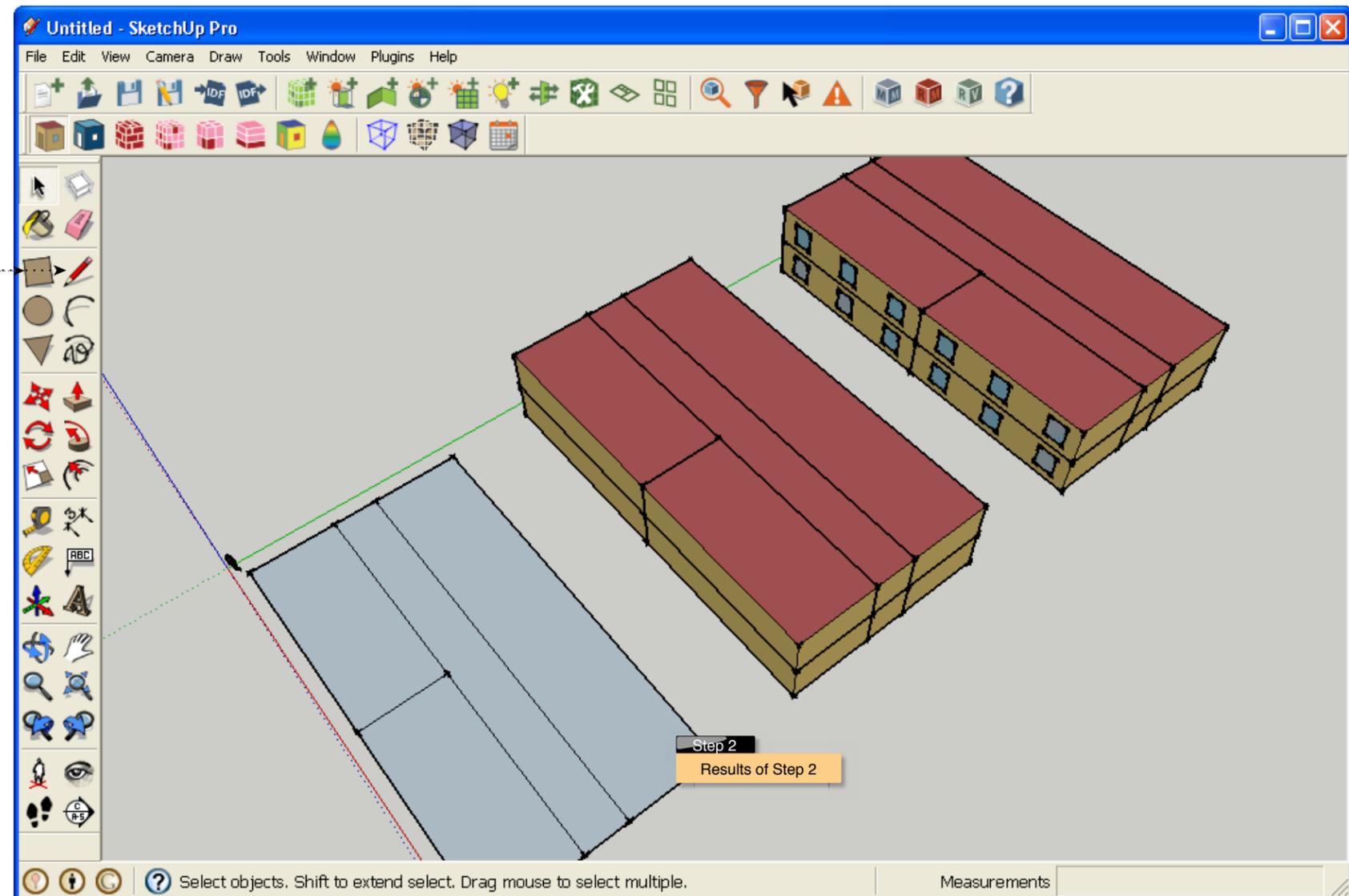
Run Simulation From RunManger App vs. SketchUp Plugin

View all SketchUp keys at once

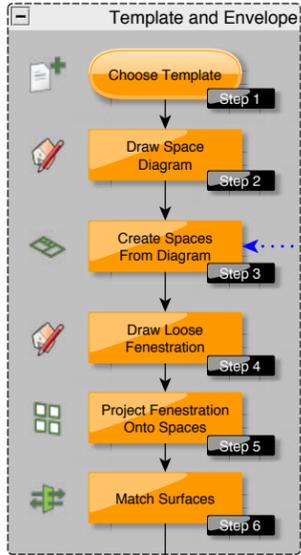
View all SystemOutliner keys at once

Watch Online Training Video Step 2

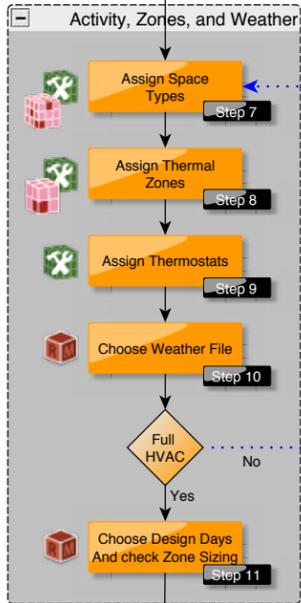
Step 2
Step 4
SketchUp Rectangle and Pencil Tools



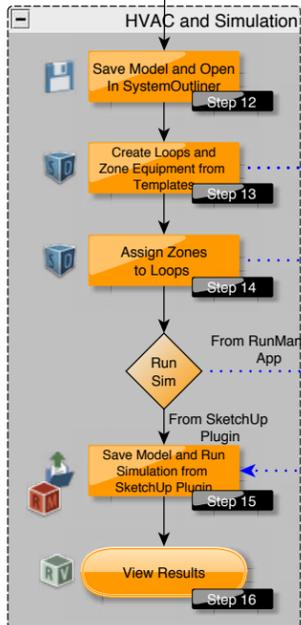
Create Spaces from Diagram | **STEP 3 of 16**



- Model from Photographs
- Import From Cad File



- Import IDF File (with loads removed)

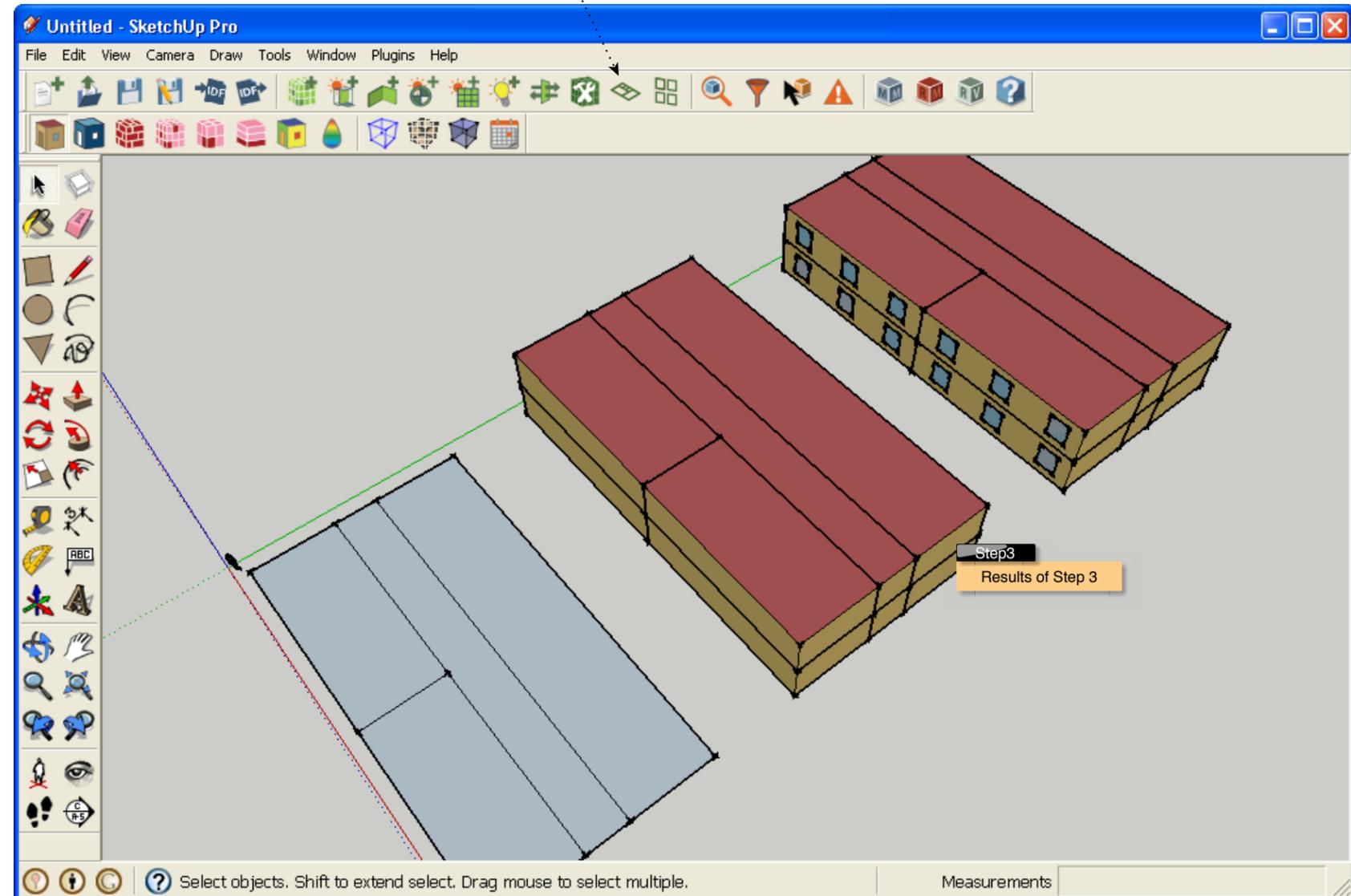


- Turn on Ideal Air Loads for all Zones
- Add Template Systems with Plant and Air Loops
- Multiple Air Loops Sharing set of Plant Loops
- Zone Equipment vs. Air Loops
- Setting Control Zones for Single Zone Setpoint Manager
- Run Simulation From RunManger App. vs. SketchUp Plugin

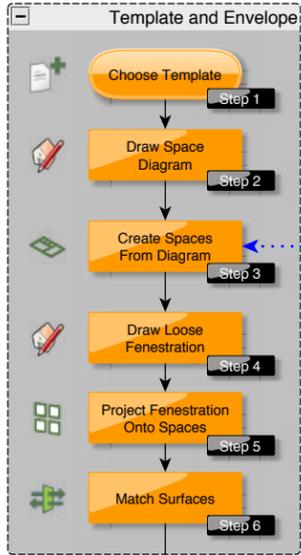
View all SketchUp keys at once

View all SystemOutliner keys at once

Watch Online Training Video Step 3

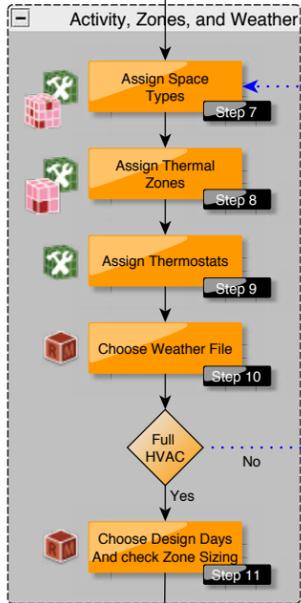


Draw Loose Fenestration Onto Spaces | **STEP 4 of 16**

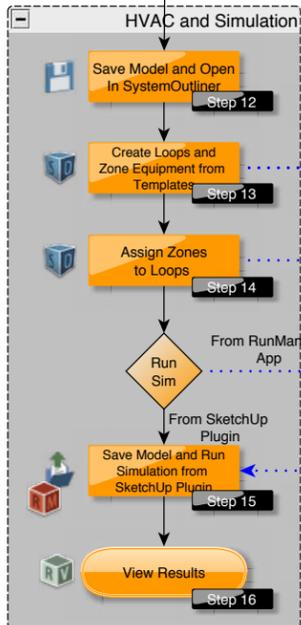


Model from Photographs

Import From Cad File



Import IDF File (with loads removed)



Turn on Ideal Air Loads for all Zones

Add Template Systems with Plant and Air Loops

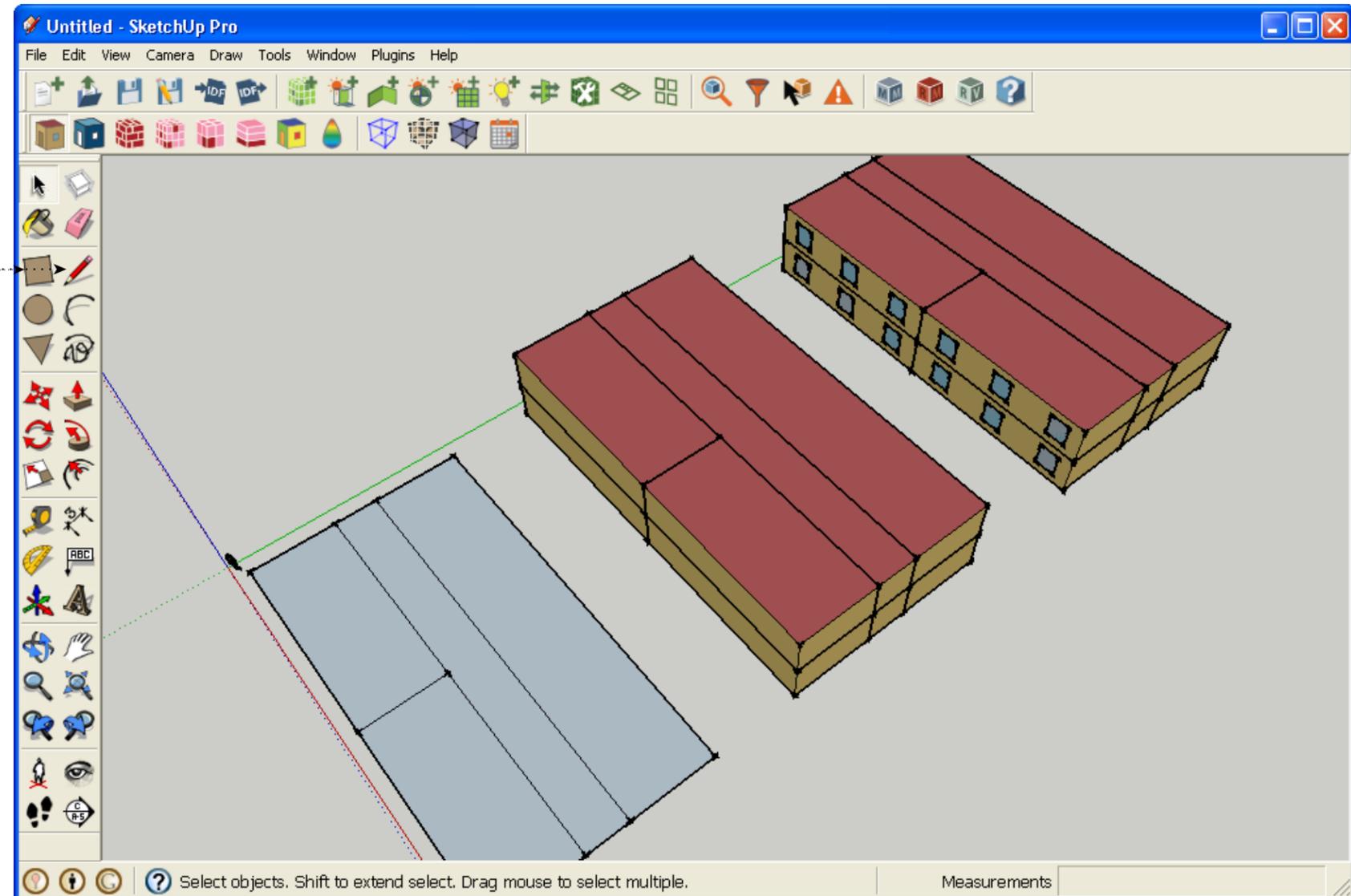
Multiple Air Loops Sharing set of Plant Loops

Zone Equipment vs. Air Loops

Setting Control Zones for Single Zone Setpoint Manager

Run Simulation From RunManger App. vs. SketchUp Plugin

Step 2
Step 4
SketchUp Rectangle and Pencil Tools

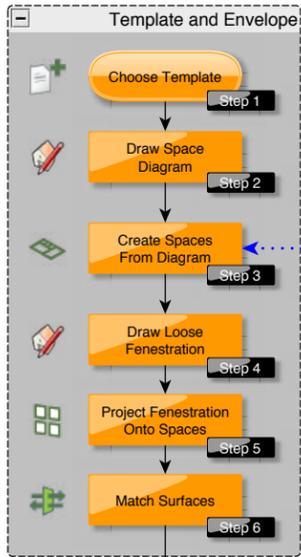


View all SketchUp keys at once

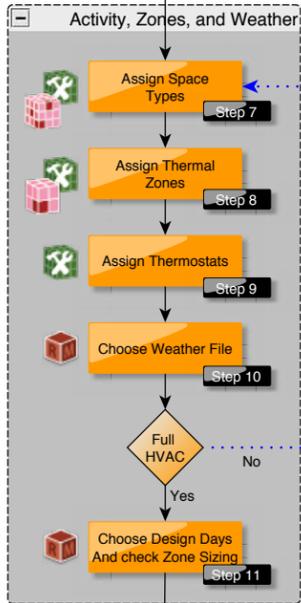
View all SystemOutliner keys at once

Watch Online Training Video Step 4

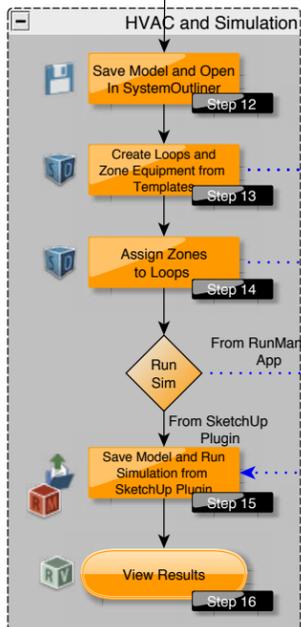
Project Fenestration Onto Spaces | **STEP 5 of 16**



Model from Photographs
Import From Cad File



Import IDF File (with loads removed)

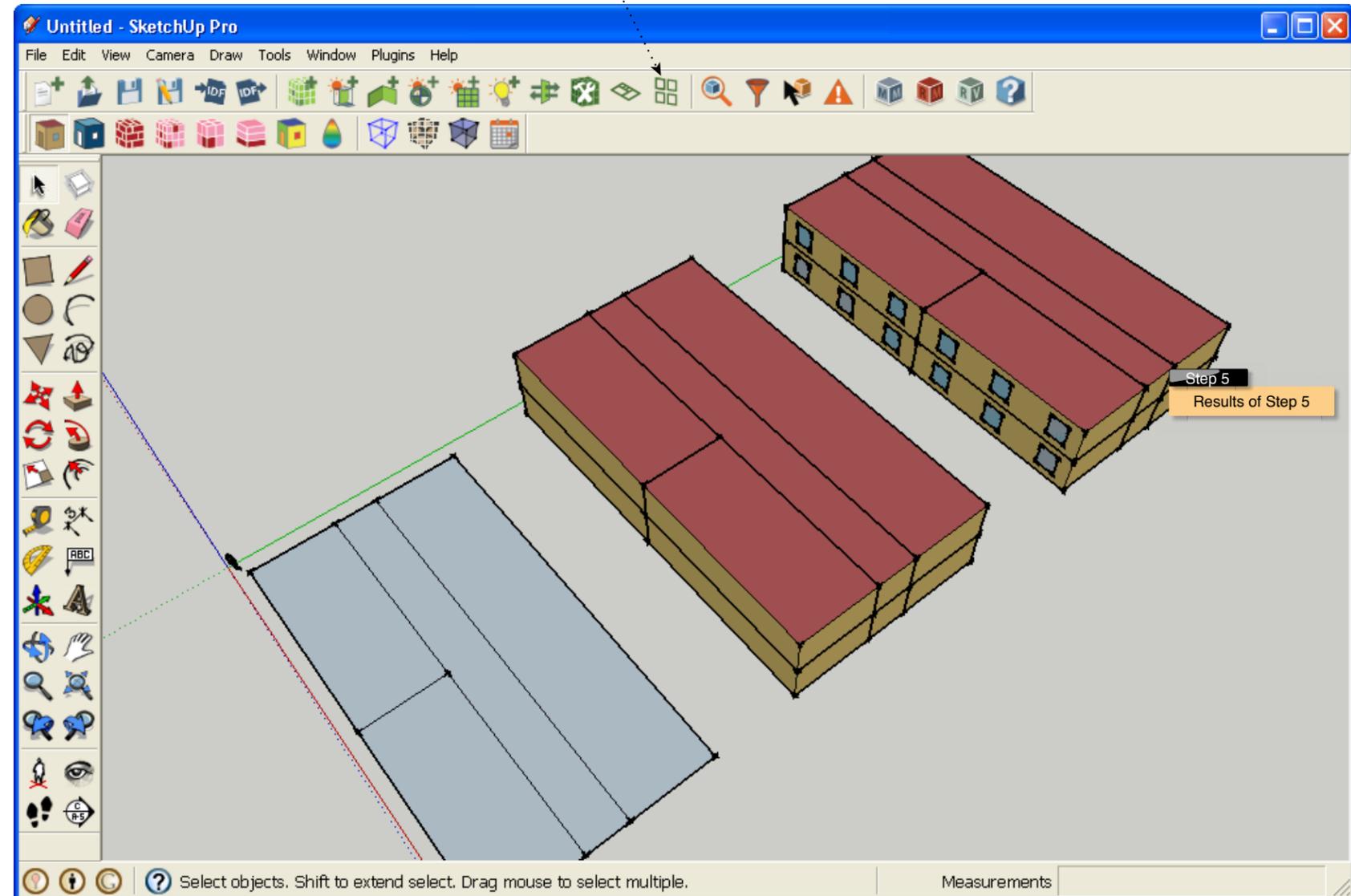


Turn on Ideal Air Loads for all Zones
Add Template Systems with Plant and Air Loops
Multiple Air Loops Sharing set of Plant Loops
Zone Equipment vs. Air Loops
Setting Control Zones for Single Zone Setpoint Manager
Run Simulation From RunManger App. vs. SketchUp Plugin

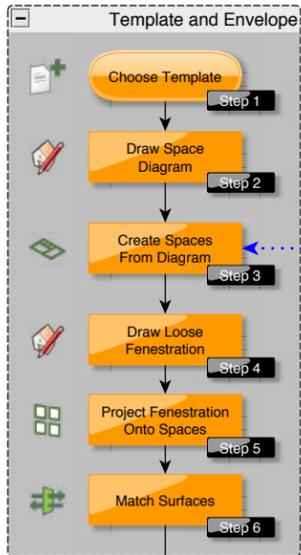
View all SketchUp keys at once

View all SystemOutliner keys at once

Watch Online Training Video Step 5

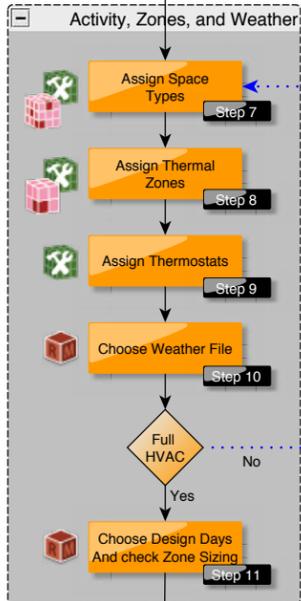


Match Surfaces | STEP 6 of 16

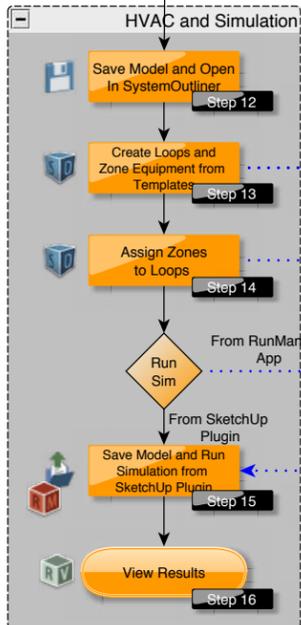


Model from Photographs

Import From Cad File



Import IDF File (with loads removed)



Add Template Systems with Plant and Air Loops

Multiple Air Loops Sharing set of Plant Loops

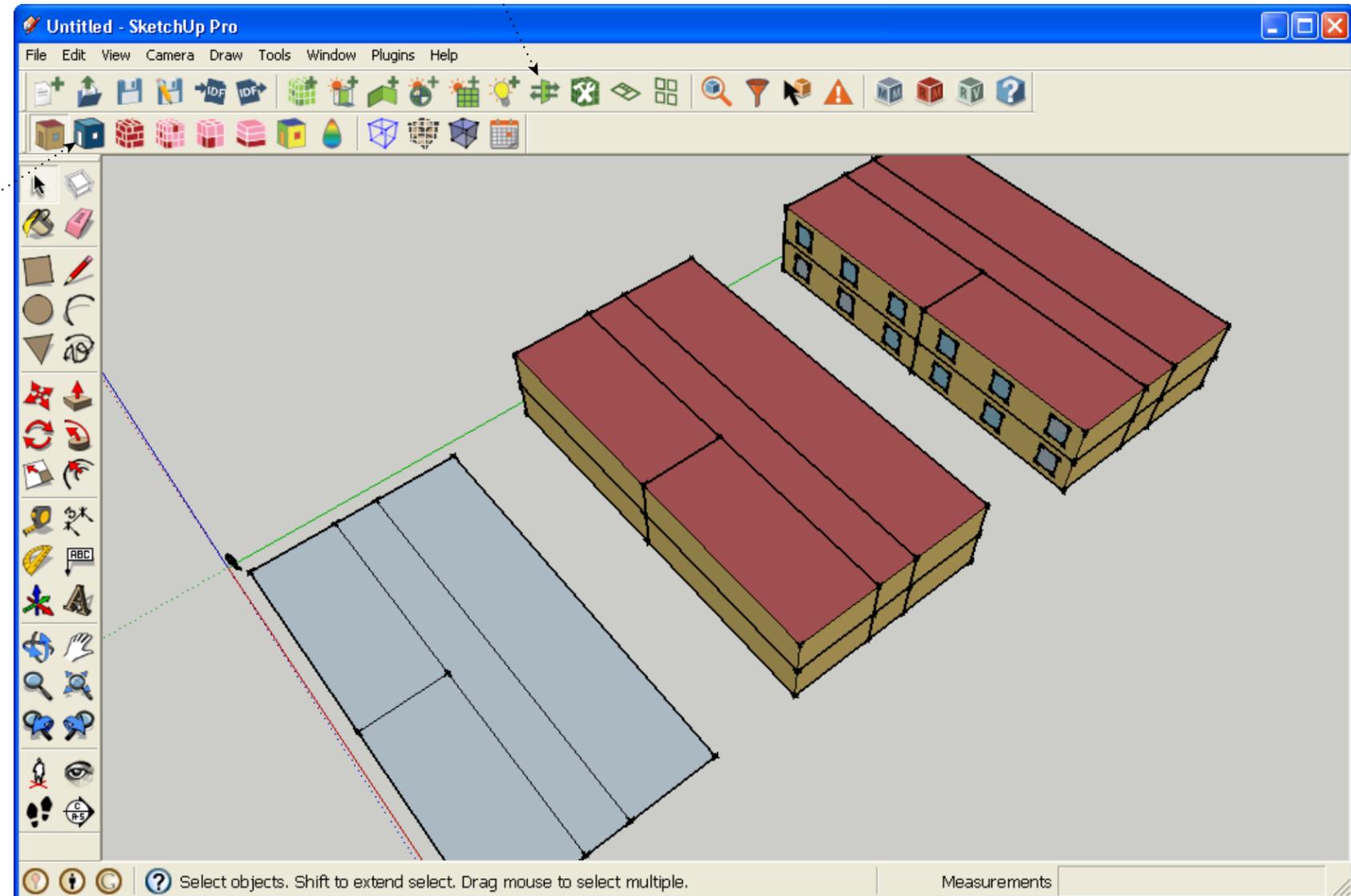
Zone Equipment vs. Air Loops

Setting Control Zones for Single Zone Setpoint Manager

Run Simulation From RunManger App. vs. SketchUp Plugin

Step 6
Render by Boundary

Step 6
Match Surfaces

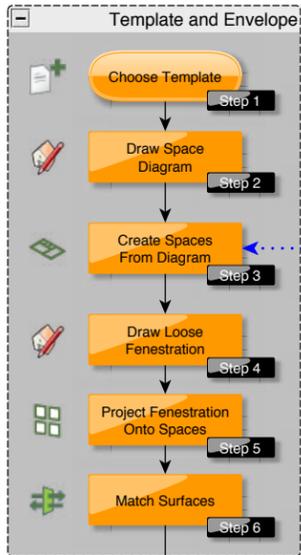


View all SketchUp keys at once

View all SystemOutliner keys at once

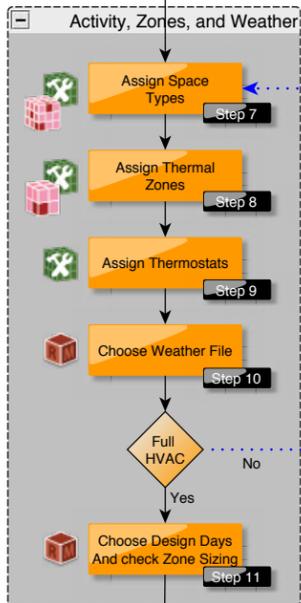
Watch Online Training Video Step 6

Assign Space Types | STEP 7 of 16



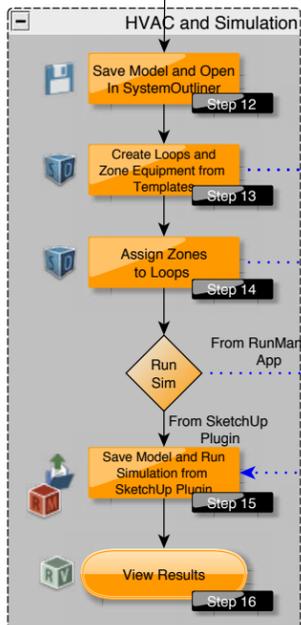
Model from Photographs

Import From Cad File



Import IDF File (with loads removed)

Turn on Ideal Air Loads for all Zones



Add Template Systems with Plant and Air Loops

Multiple Air Loops Sharing set of Plant Loops

Zone Equipment vs. Air Loops

Setting Control Zones for Single Zone Setpoint Manager

Run Simulation From RunManger App. vs. SketchUp Plugin

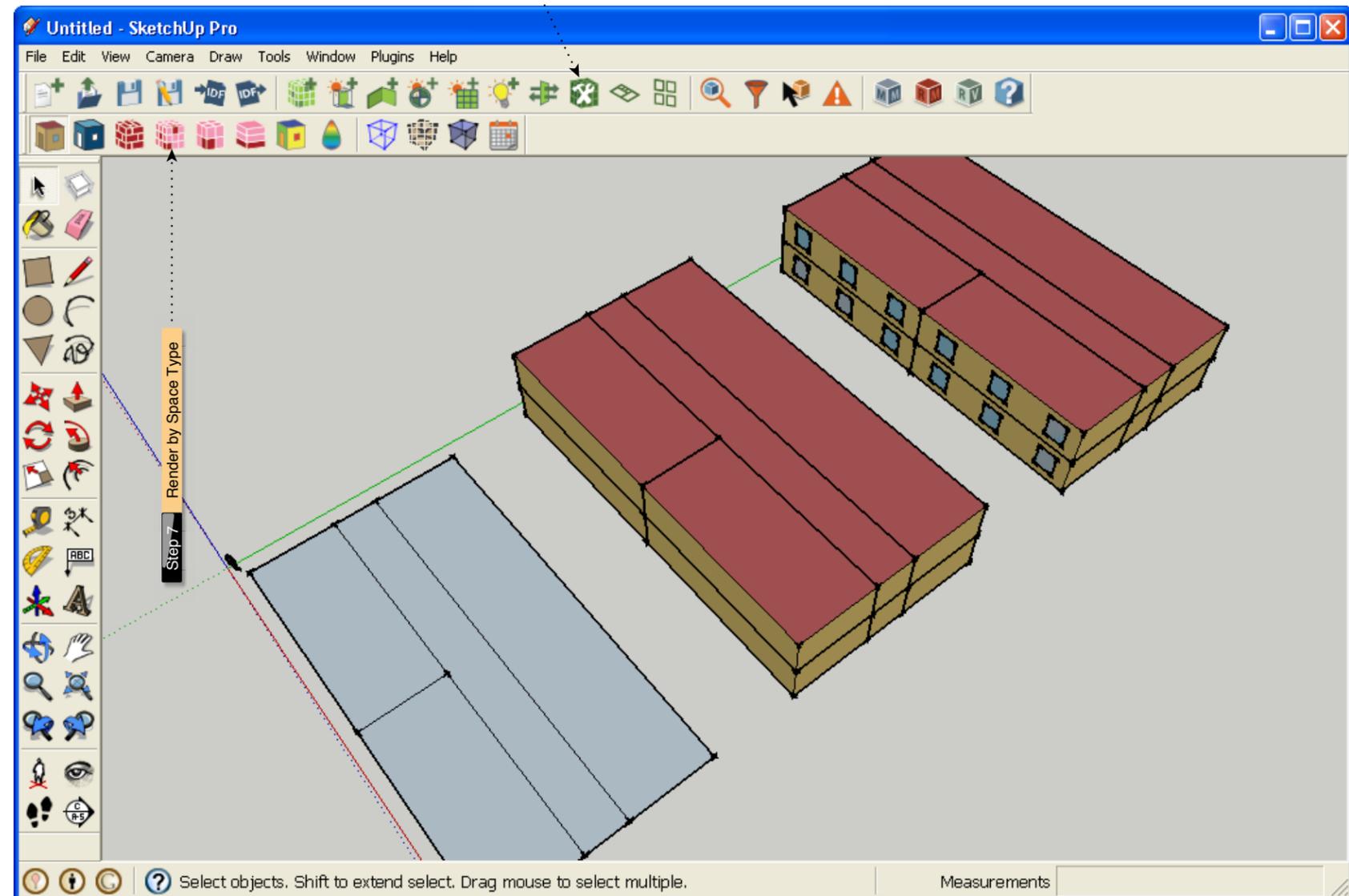
Step 7
Step 8
Step 9

Assign Space Types, Thermal Zones, and Thermostats

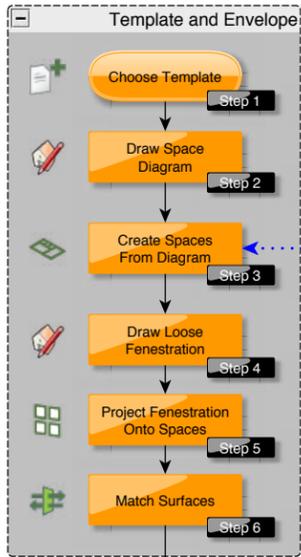
View all SketchUp keys at once

View all SystemOutliner keys at once

Watch Online Training Video Step 7

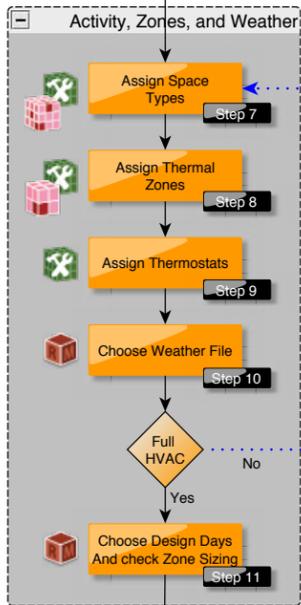


Assign Thermal Zones | STEP 8 of 16



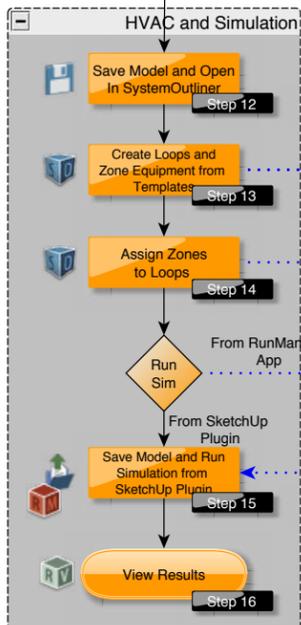
Model from Photographs

Import From Cad File



Import IDF File (with loads removed)

Turn on Ideal Air Loads for all Zones



Add Template Systems with Plant and Air Loops

Multiple Air Loops Sharing set of Plant Loops

Zone Equipment vs. Air Loops

Setting Control Zones for Single Zone Setpoint Manager

Run Simulation From RunManger App. vs. SketchUp Plugin

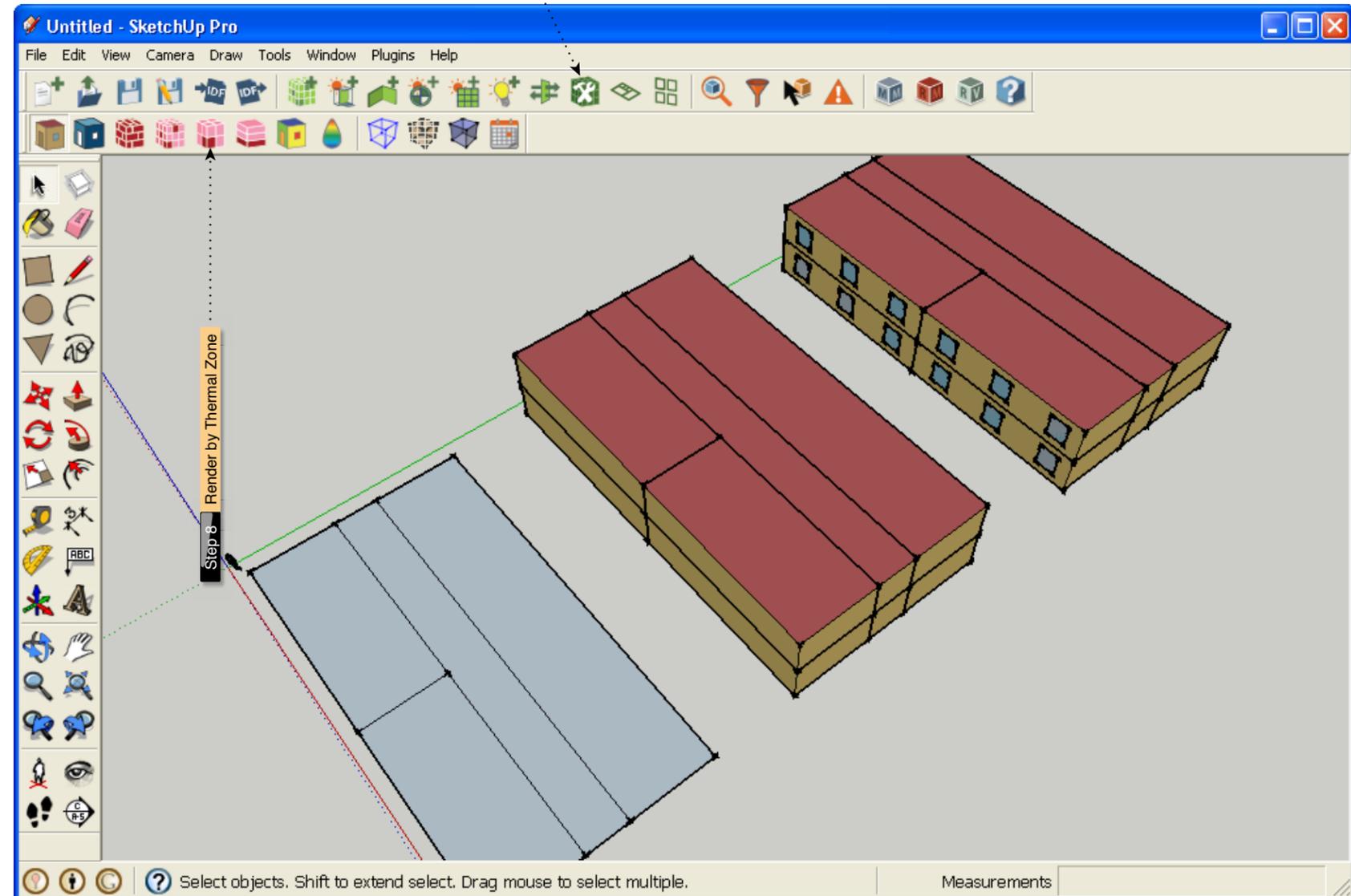
Step 7
Step 8
Step 9

Assign Space Types, Thermal Zones, and Thermostats

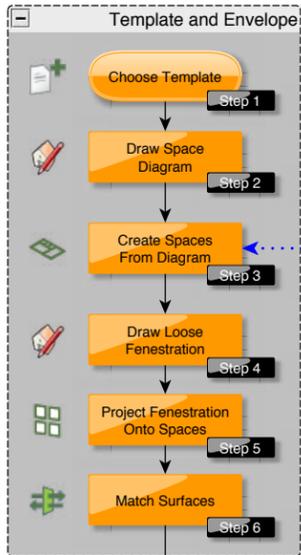
View all SketchUp keys at once

View all SystemOutliner keys at once

Watch Online Training Video Step 8

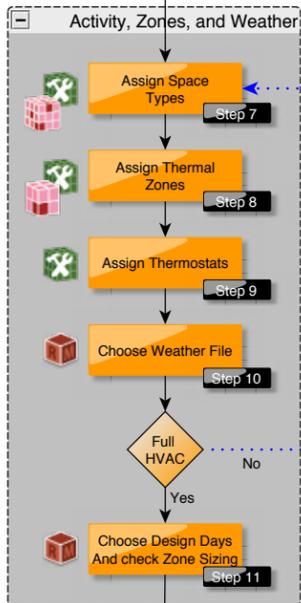


Assign Thermostats | STEP 9 of 16



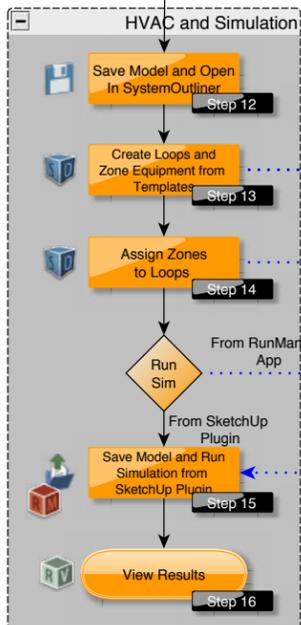
Model from Photographs

Import From Cad File



Import IDF File (with loads removed)

Turn on Ideal Air Loads for all Zones



Add Template Systems with Plant and Air Loops

Multiple Air Loops Sharing set of Plant Loops

Zone Equipment vs. Air Loops

Setting Control Zones for Single Zone Setpoint Manager

Run Simulation From RunManger App. vs. SketchUp Plugin

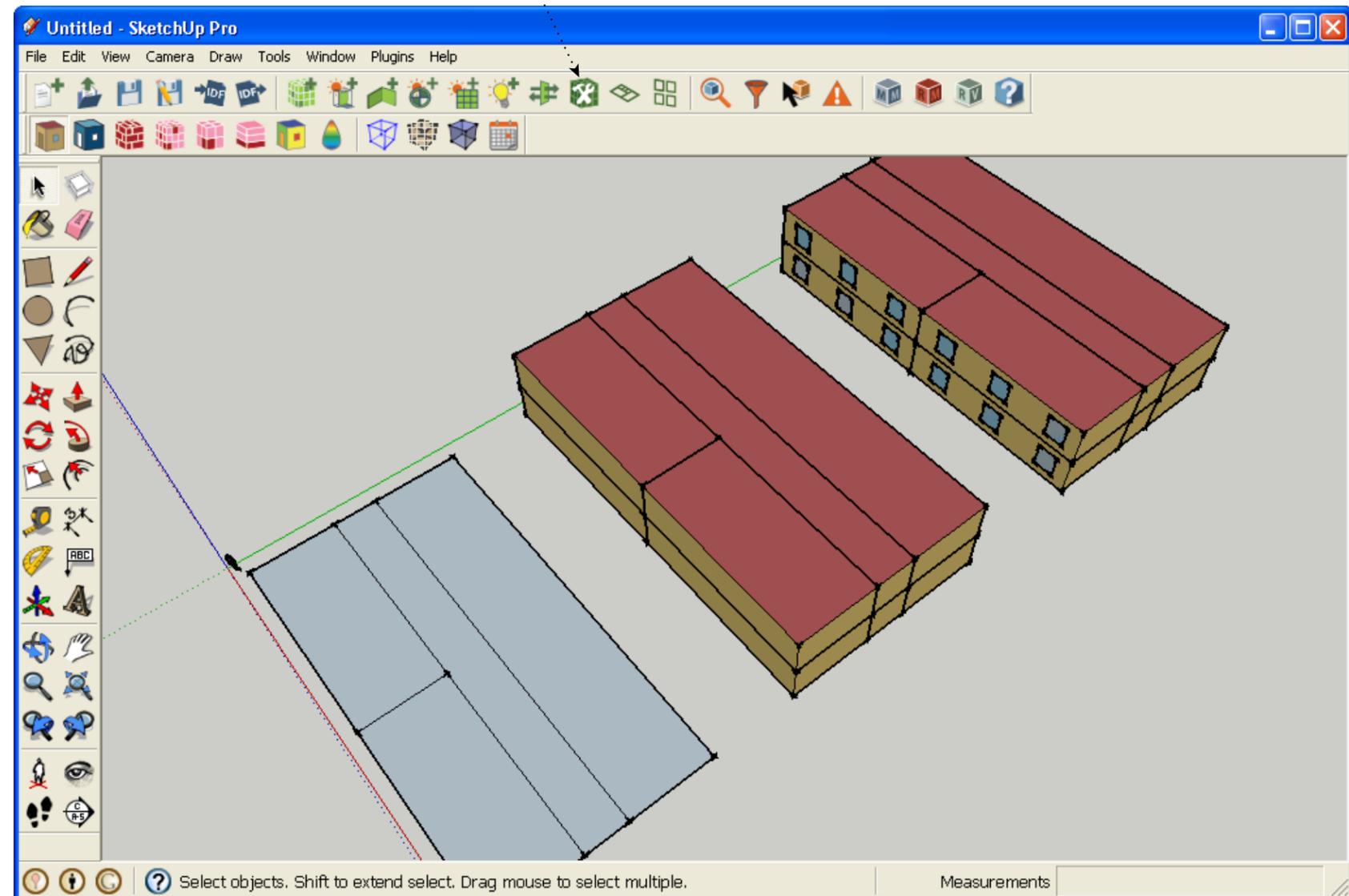
Step 7
Step 8
Step 9

Assign Space Types, Thermal Zones, and Thermostats

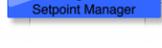
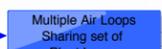
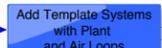
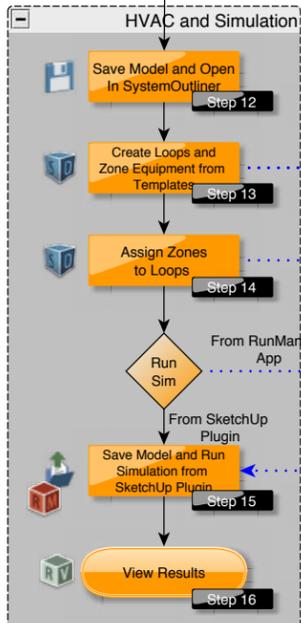
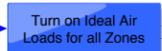
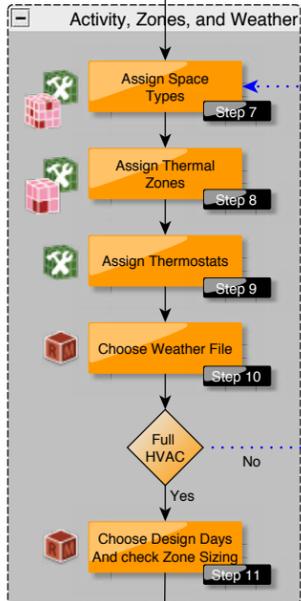
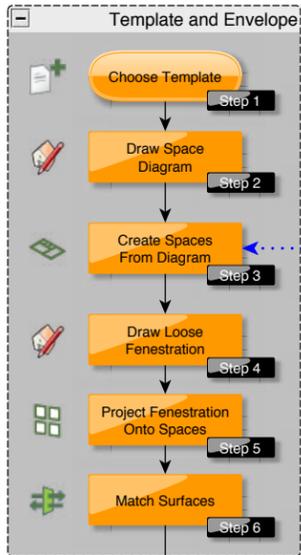
View all SketchUp keys at once

View all SystemOutliner keys at once

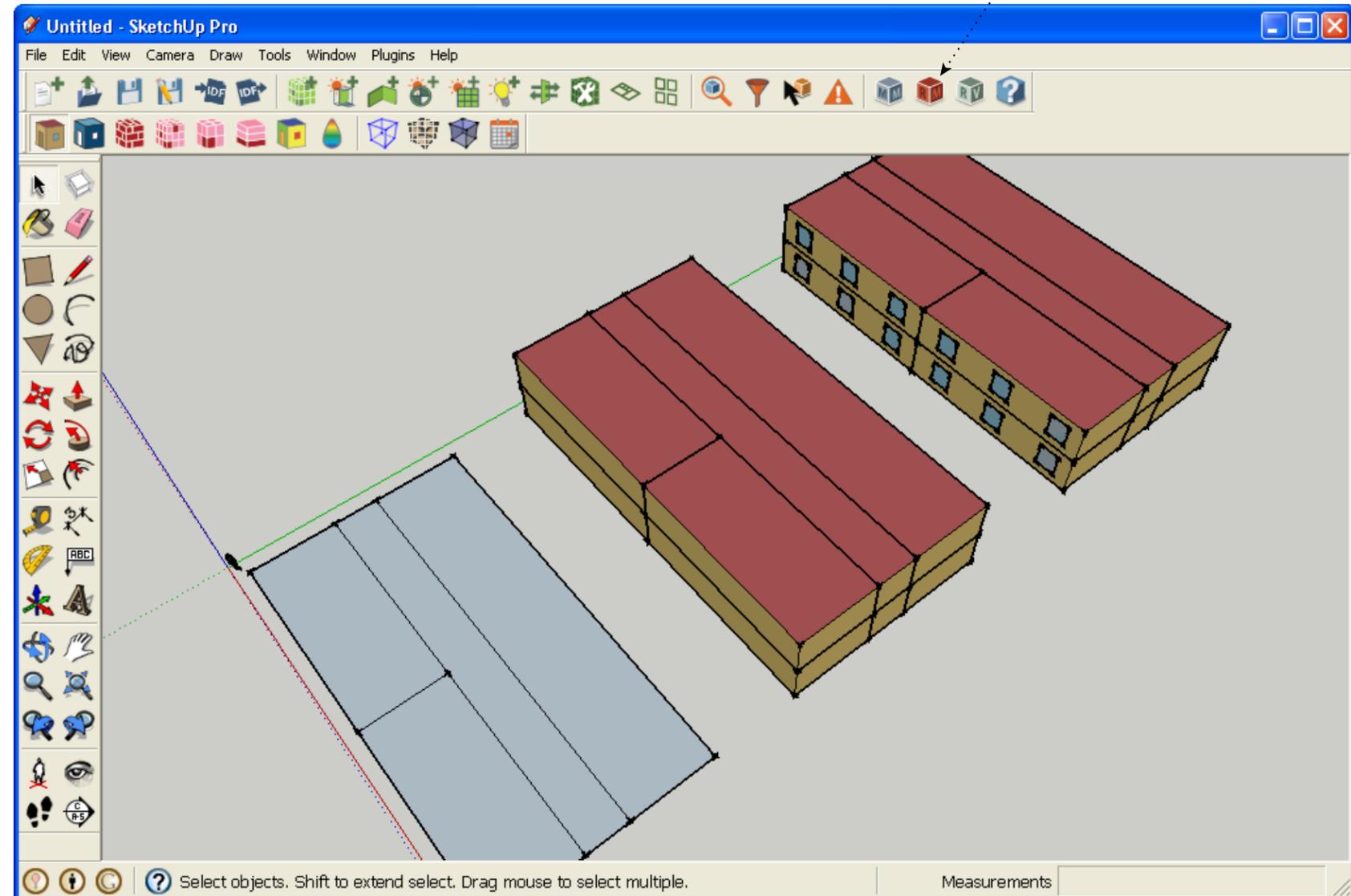
Watch Online Training Video Step 9



Choose Weather File | **STEP 10 of 16**



Run Simulation

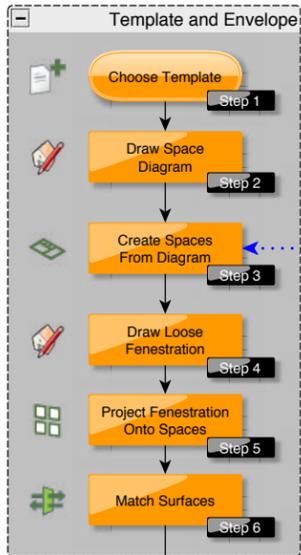


View all SketchUp keys at once

View all SystemOutliner keys at once

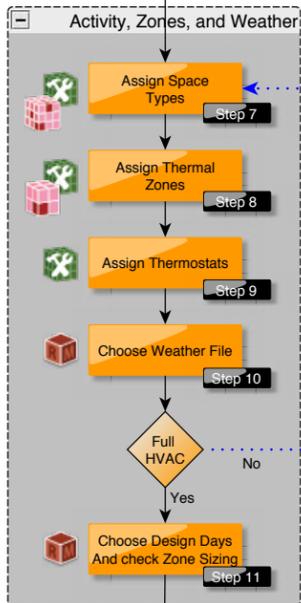
Watch Online Training Video Step 10

Choose Design Days and Check Zone Sizing | **STEP 11 of 16**



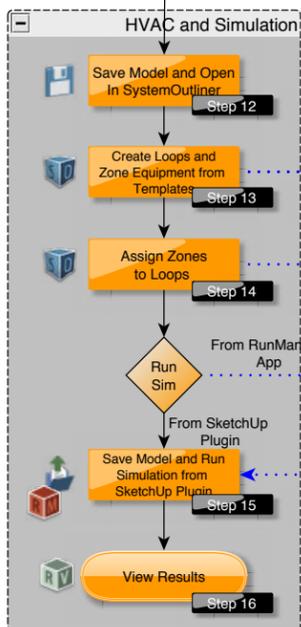
Model from Photographs

Import From Cad File



Import IDF File (with loads removed)

Turn on Ideal Air Loads for all Zones



Add Template Systems with Plant and Air Loops

Multiple Air Loops Sharing set of Plant Loops

Zone Equipment vs. Air Loops

Setting Control Zones for Single Zone Setpoint Manager

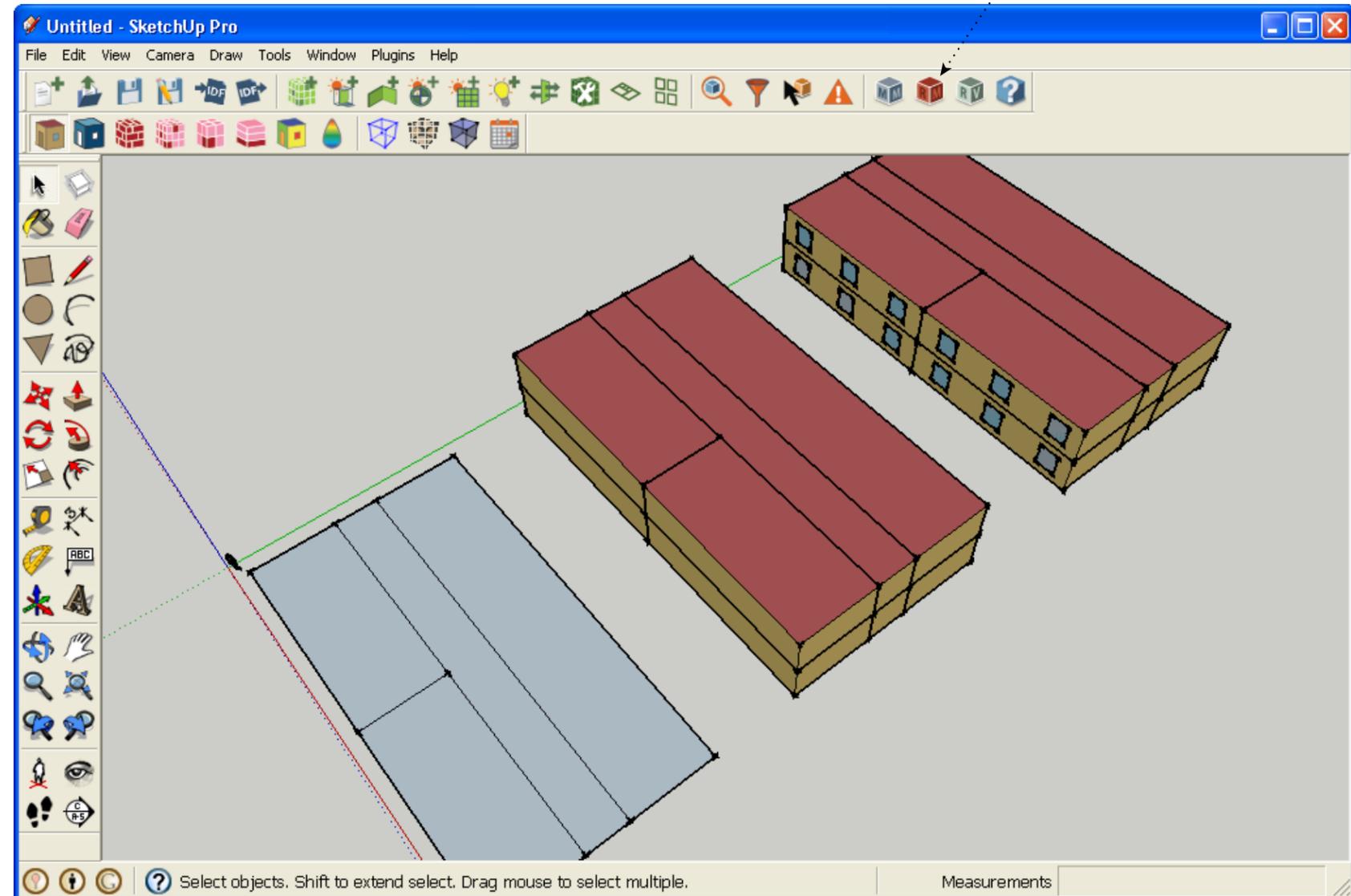
Run Simulation From RunManger App. vs. SketchUp Plugin

Step 10

Step 11

Step 15

Run Simulation

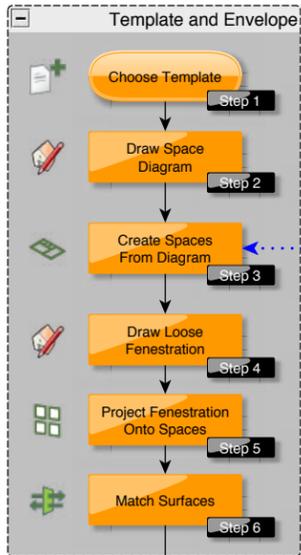


View all SketchUp keys at once

View all SystemOutliner keys at once

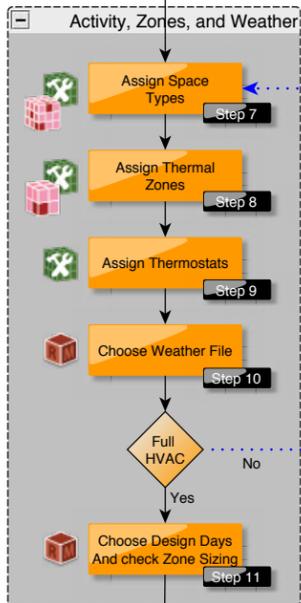
Watch Online Training Video Step 11

Save Model and Open in System Outliner | **STEP 12 of 16**



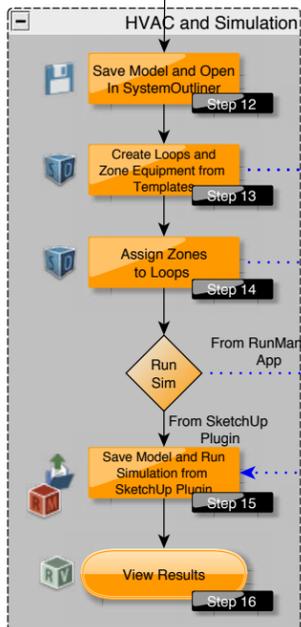
Model from Photographs

Import From Cad File



Import IDF File (with loads removed)

Turn on Ideal Air Loads for all Zones



Add Template Systems with Plant and Air Loops

Multiple Air Loops Sharing set of Plant Loops

Zone Equipment vs. Air Loops

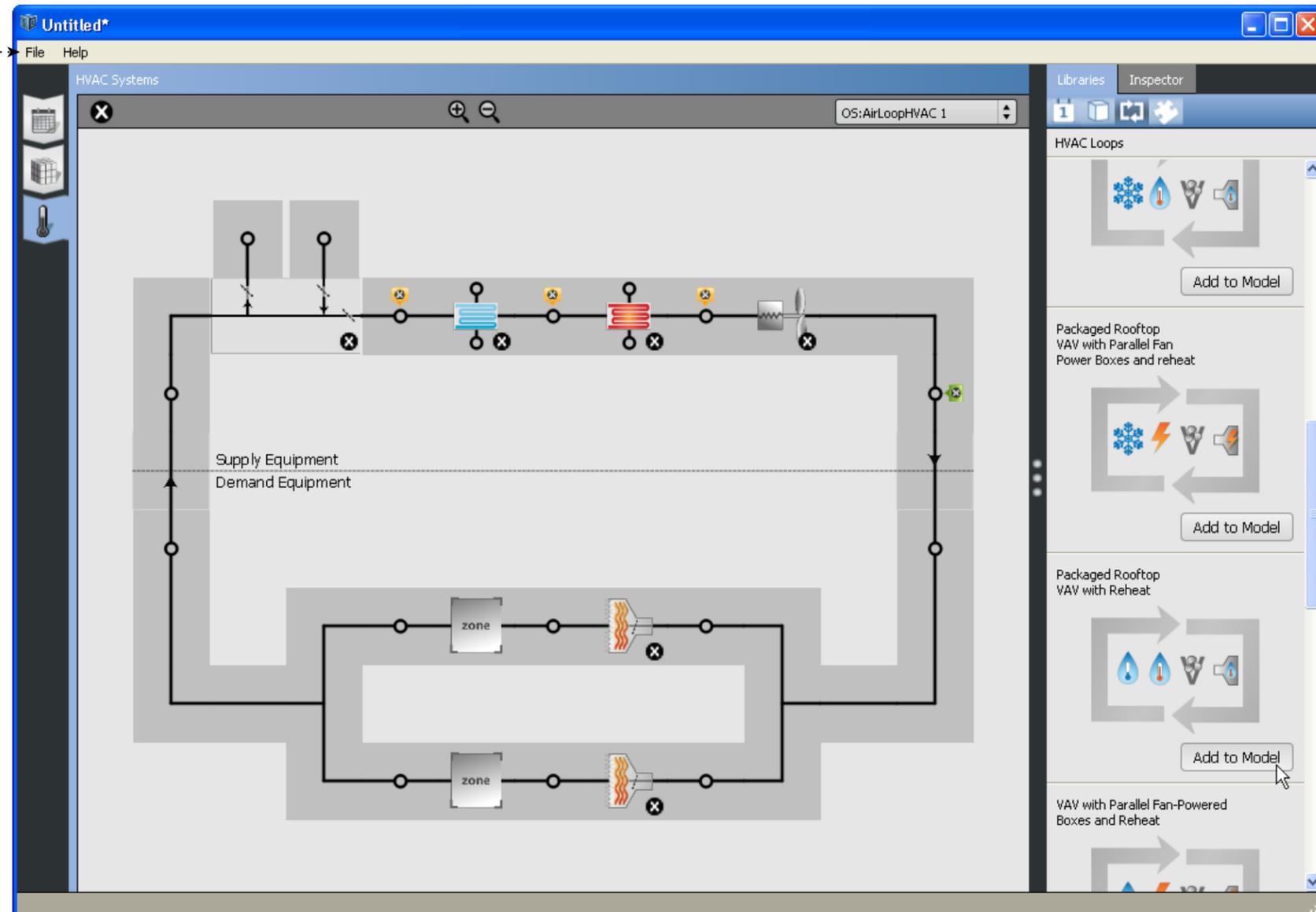
Setting Control Zones for Single Zone Setpoint Manager

Run Simulation From RunManger App. vs. SketchUp Plugin

Step 12

Step 15

File Menu (Open/Save)



View all SketchUp keys at once

View all SystemOutliner keys at once

Watch Online Training Video Step 12

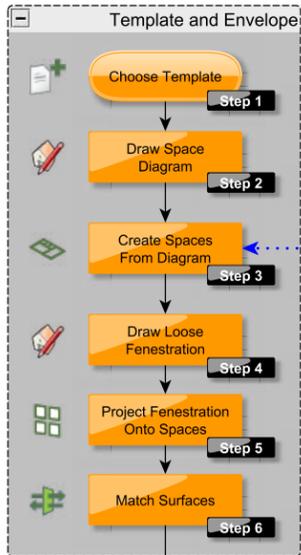
Create Loops and Zone Equipment from Template | **STEP 13**

of 16

View all SketchUp keys at once

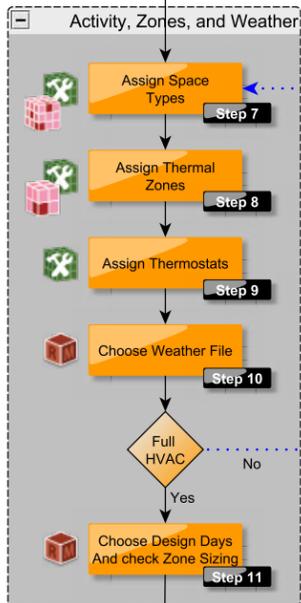
View all SystemOutliner keys at once

Watch Online Training Video Step 13



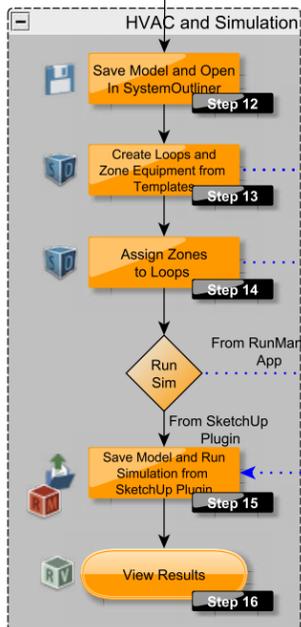
Model from Photographs

Import From Cad File



Import IDF File (with loads removed)

Turn on Ideal Air Loads for all Zones



Add Template Systems with Plant and Air Loops

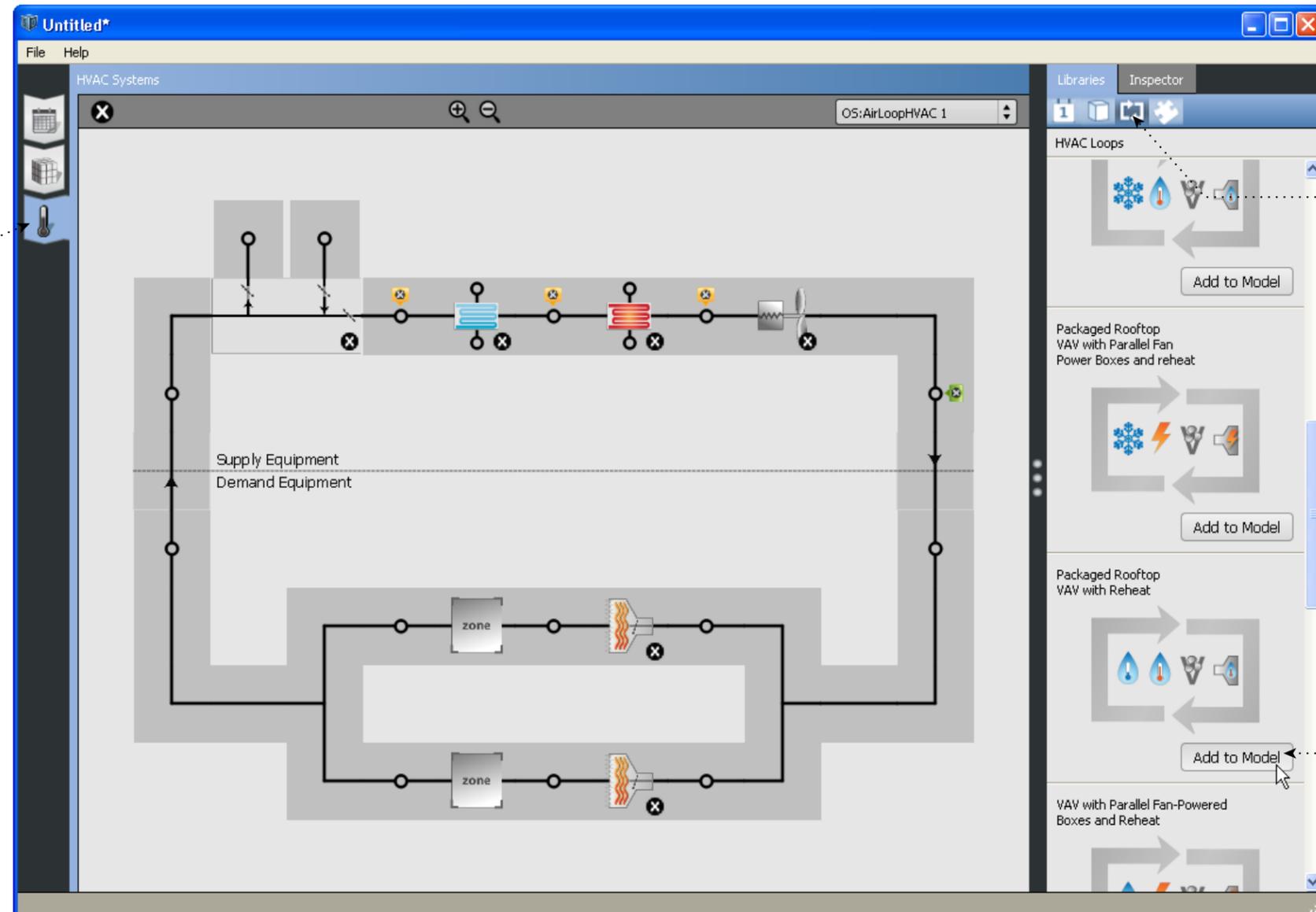
Multiple Air Loops Sharing set of Plant Loops

Zone Equipment vs. Air Loops

Setting Control Zones for Single Zone Setpoint Manager

Run Simulation From RunManger App vs. SketchUp Plugin

Run Simulation From SketchUp Plugin

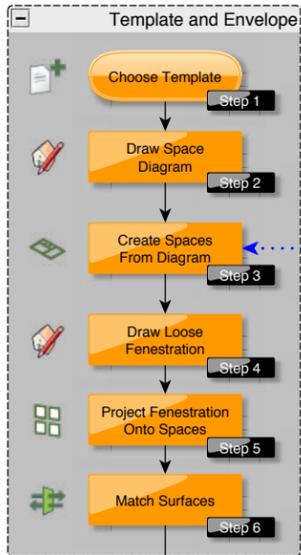


Step 13 Step 14 HVAC Systems Tab

Step 13 HVAC Templates/Loops

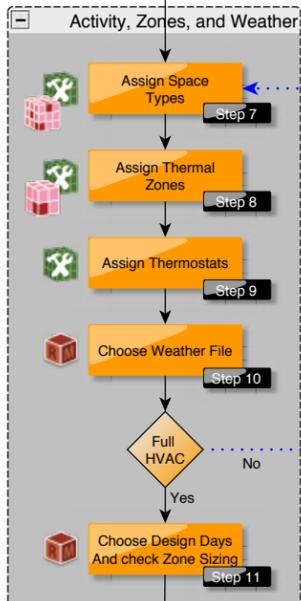
Step 13 Add Template to Model

Assign Zones to Loops | **STEP 14 of 16**



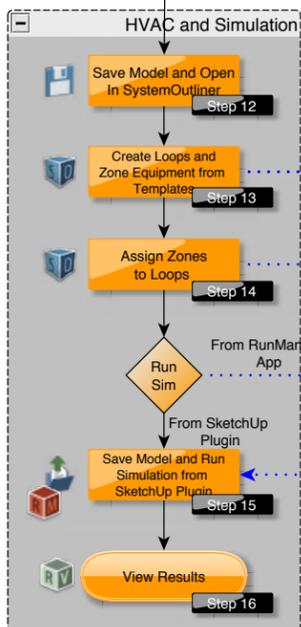
Model from Photographs

Import From Cad File



Import IDF File (with loads removed)

Turn on Ideal Air Loads for all Zones



Add Template Systems with Plant and Air Loops

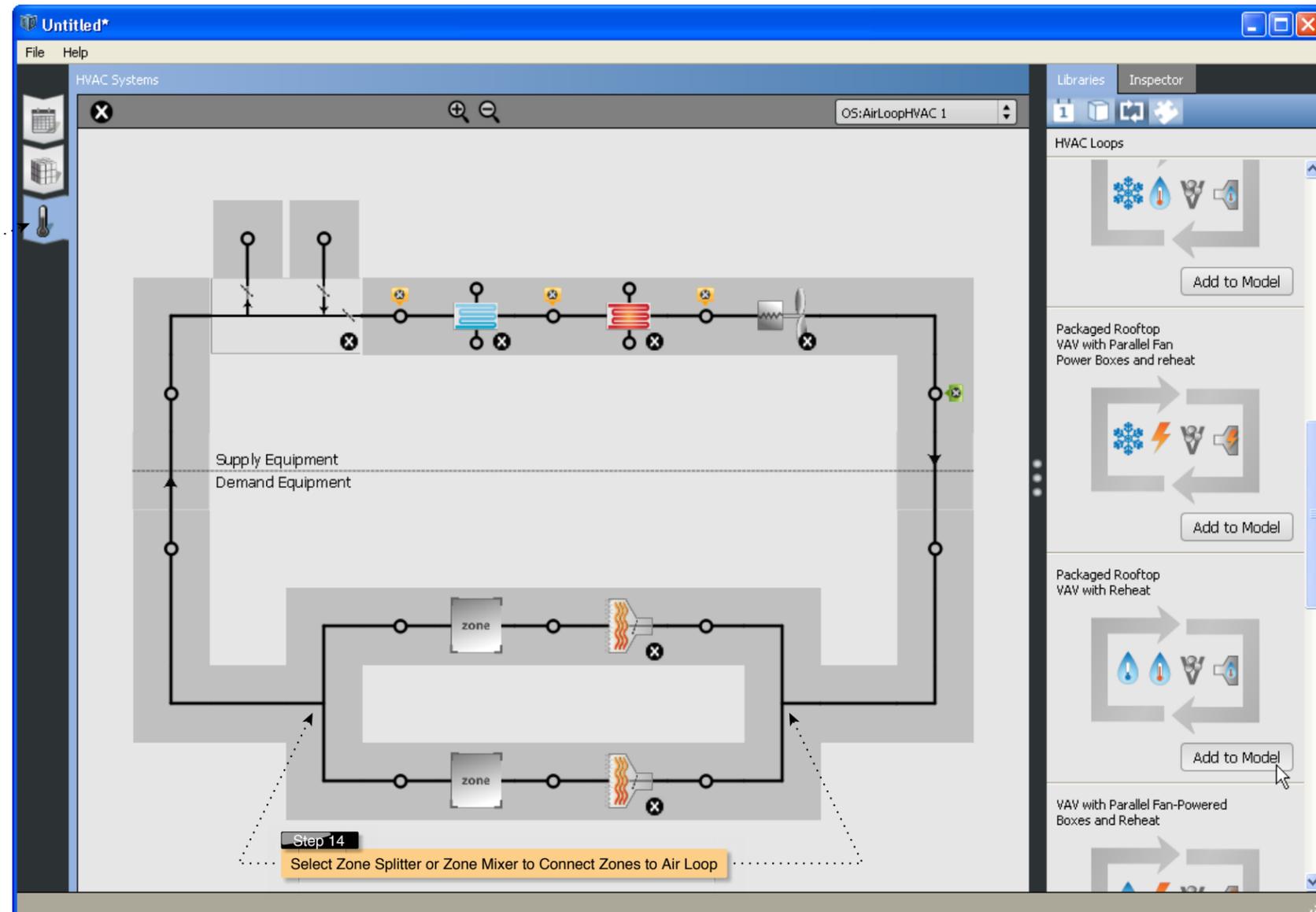
Multiple Air Loops Sharing set of Plant Loops

Zone Equipment vs. Air Loops

Setting Control Zones for Single Zone Setpoint Manager

Run Simulation From RunManger App vs. SketchUp Plugin

Step 13
Step 14
HVAC Systems Tab



View all SketchUp keys at once

View all SystemOutliner keys at once

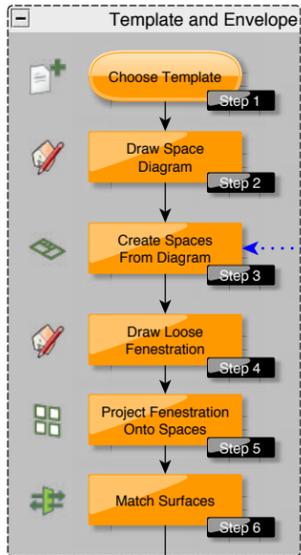
Watch Online Training Video Step 14

Save Model and Run Simulation from SketchUp Plugin | **STEP 15 of 16**

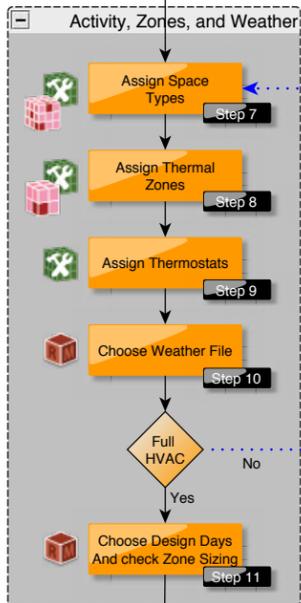
View all SketchUp keys at once

View all SystemOutliner keys at once

Watch Online Training Video Step 15

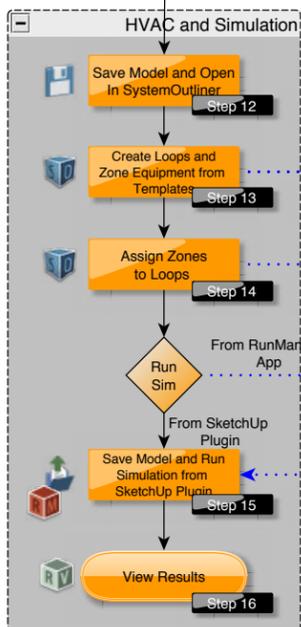


Model from Photographs
Import From Cad File



Import IDF File (with loads removed)

Turn on Ideal Air Loads for all Zones



Add Template Systems with Plant and Air Loops

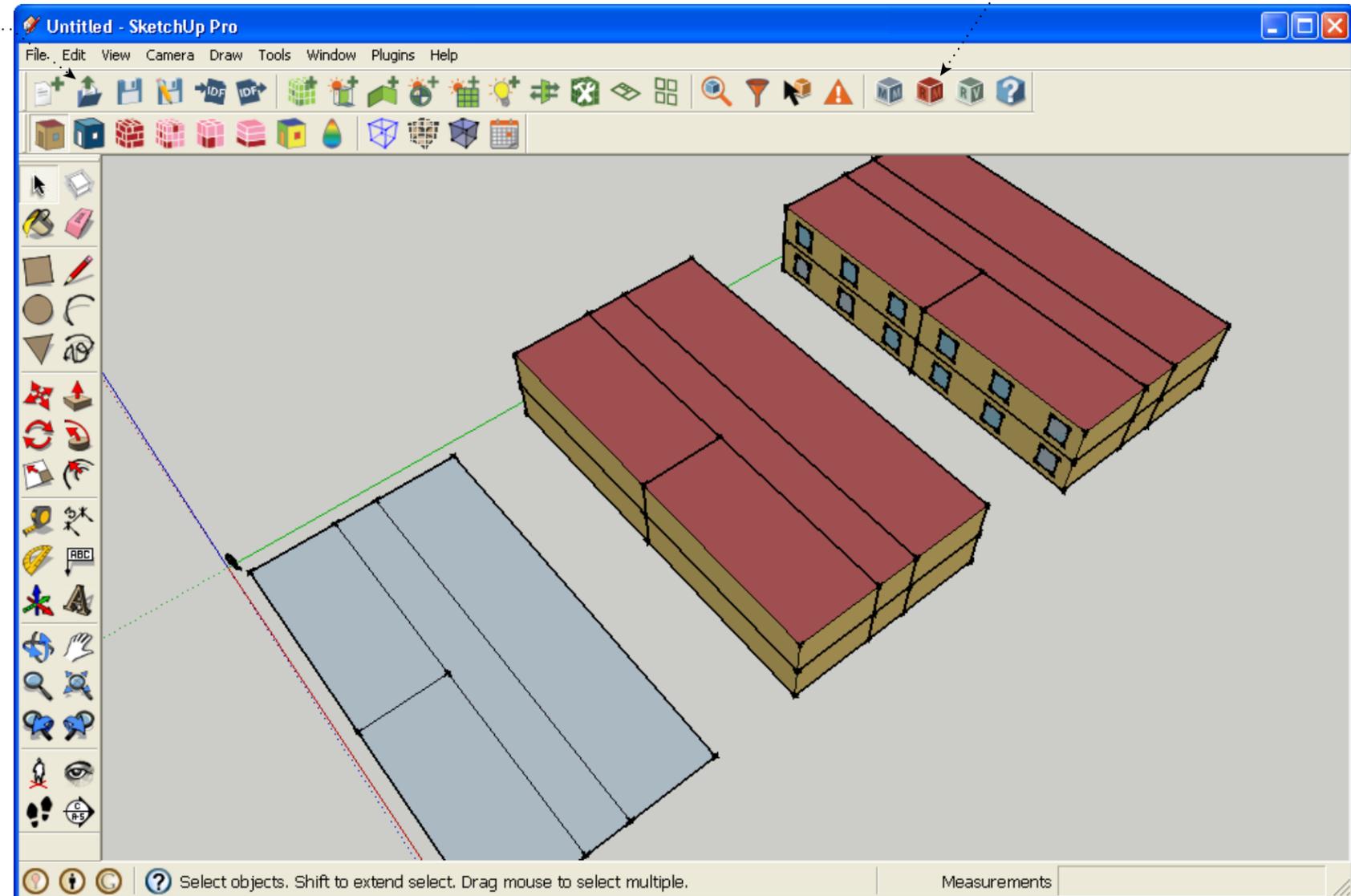
Multiple Air Loops Sharing set of Plant Loops

Zone Equipment vs. Air Loops

Setting Control Zones for Single Zone Setpoint Manager

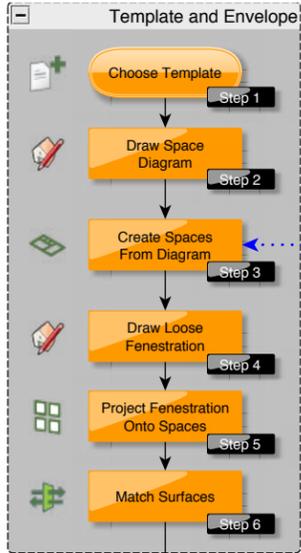
Run Simulation From RunManger App. vs. SketchUp Plugin

Step 15
Open OSM Model



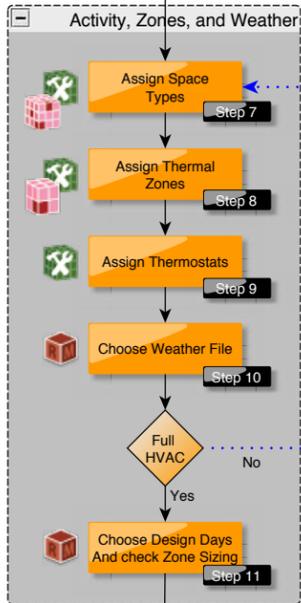
Step 10
Step 11
Step 15
Run Simulation

View Results | STEP 16 of 16



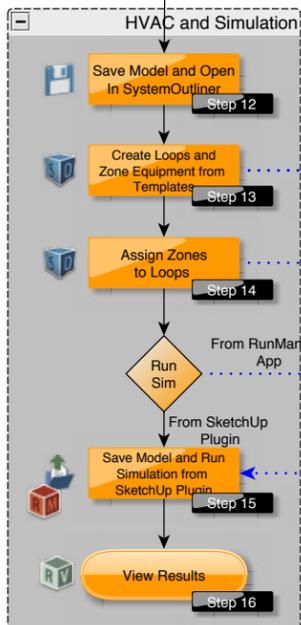
Model from Photographs

Import From Cad File



Import IDF File (with loads removed)

Turn on Ideal Air Loads for all Zones



Add Template Systems with Plant and Air Loops

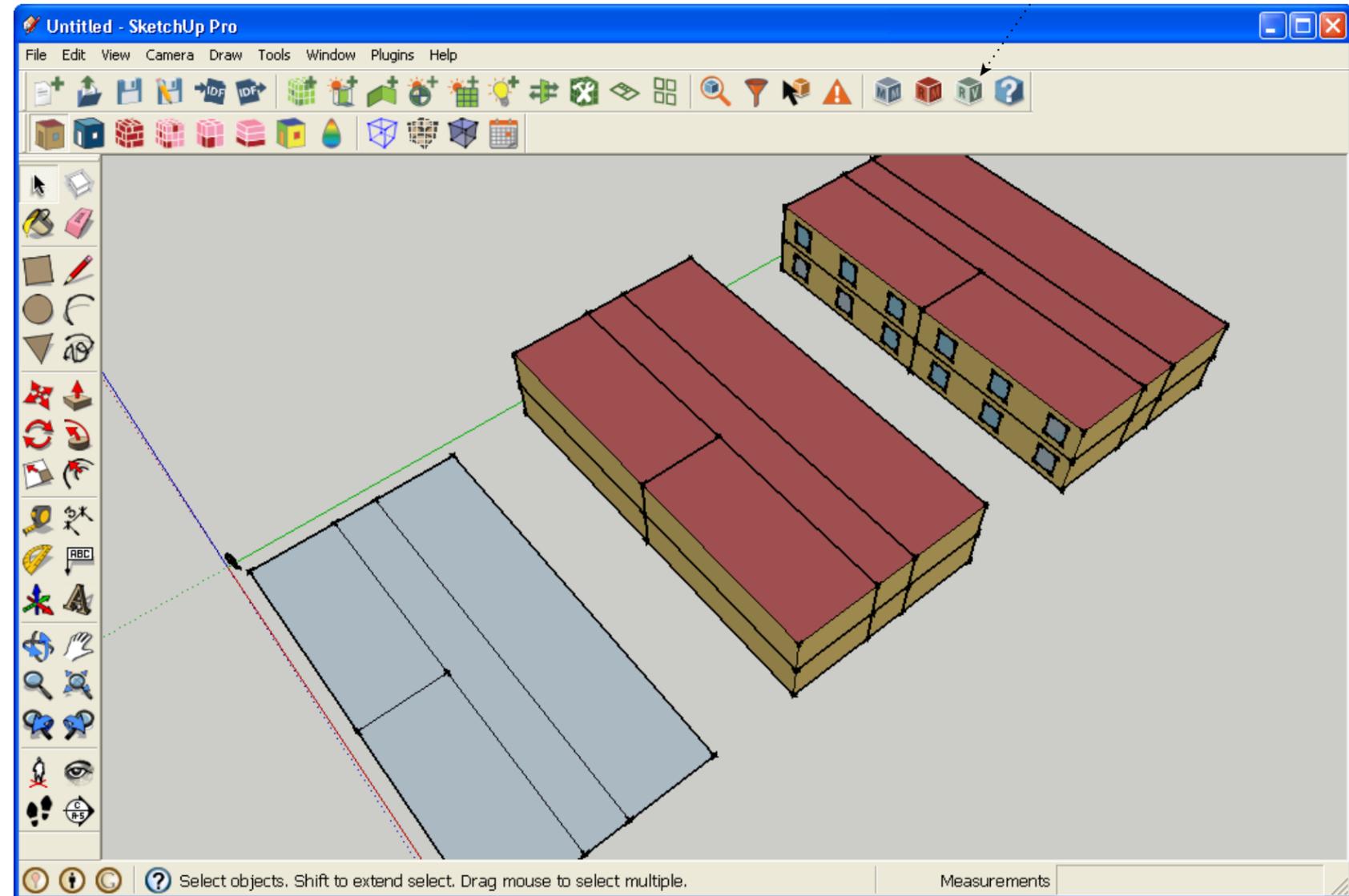
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Setting Control Zones for Single Zone Setpoint Manager

Run Simulation From RunManger App. vs. SketchUp Plugin

Step 16 View Results



View all SketchUp keys at once

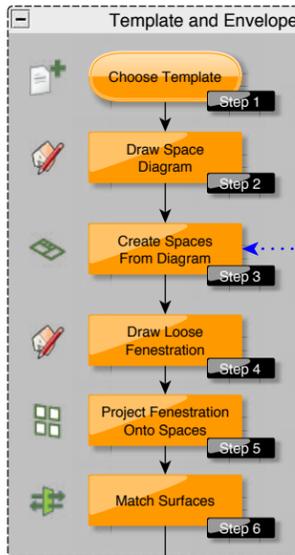
View all SystemOutliner keys at once

Watch Online Training Video Step 16

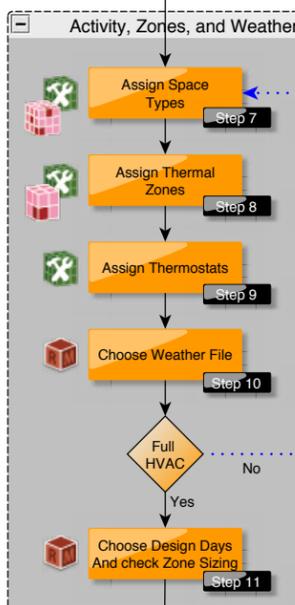
OpenStudio Basic Workflow Guide | SystemOutliner

View all SketchUp keys at once

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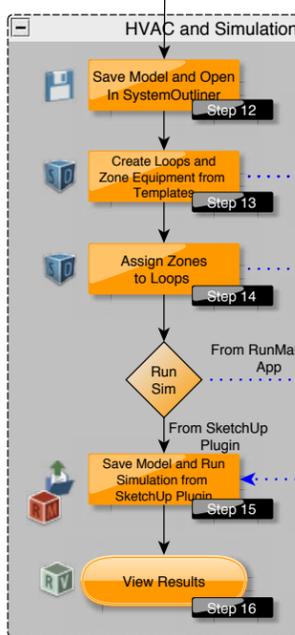


Model from Photographs
Import From Cad File



Import IDF File (with loads removed)

Turn on Ideal Air Loads for all Zones



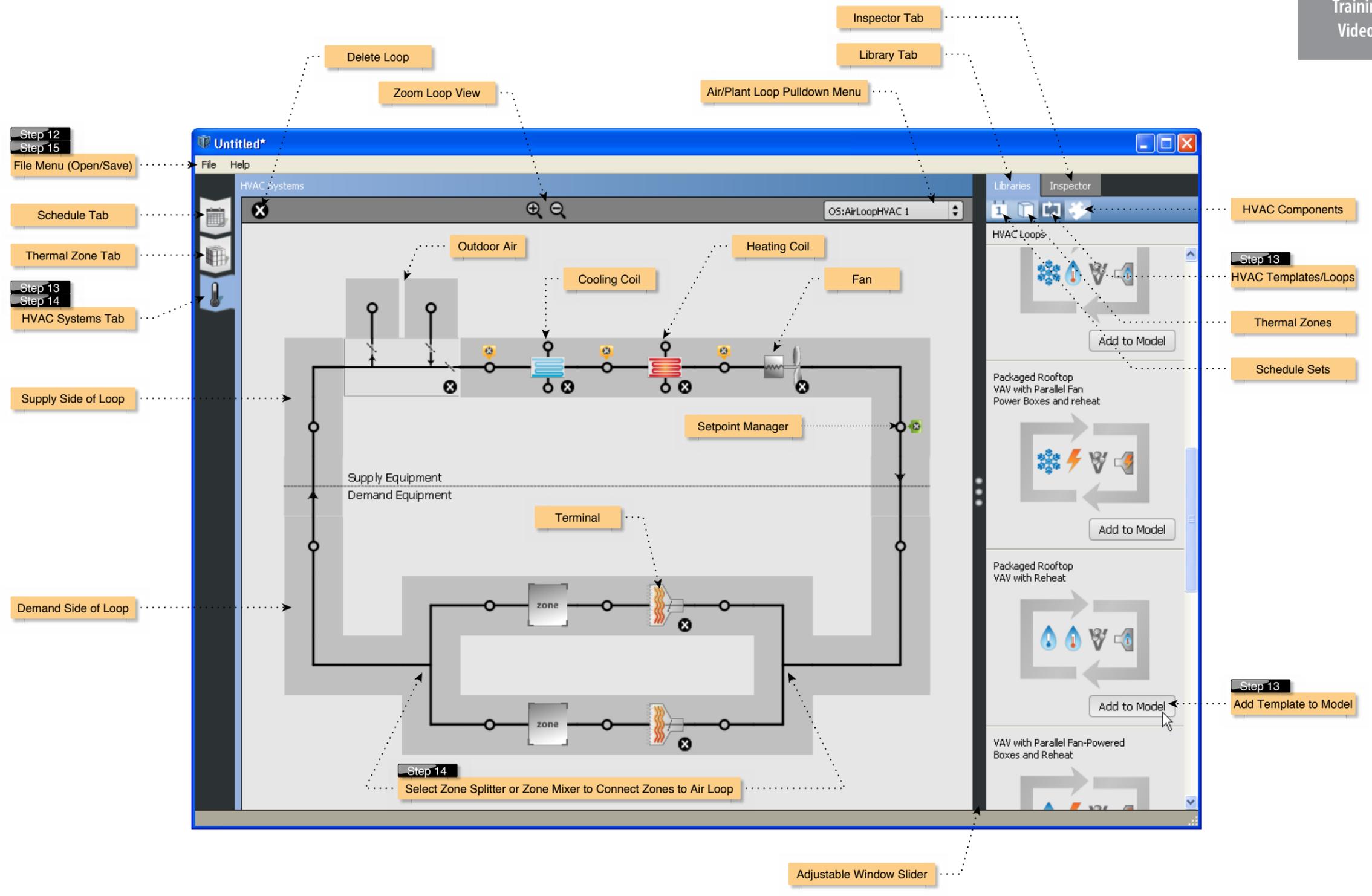
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Run Simulation From RunManger App vs. SketchUp Plugin

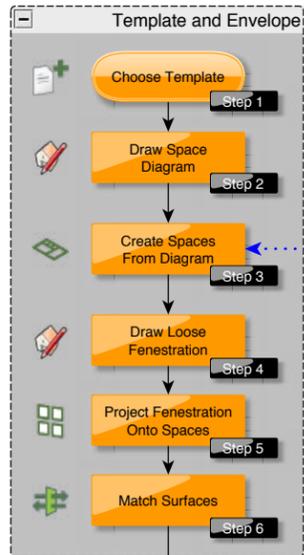


Step 14: Select Zone Splitter or Zone Mixer to Connect Zones to Air Loop

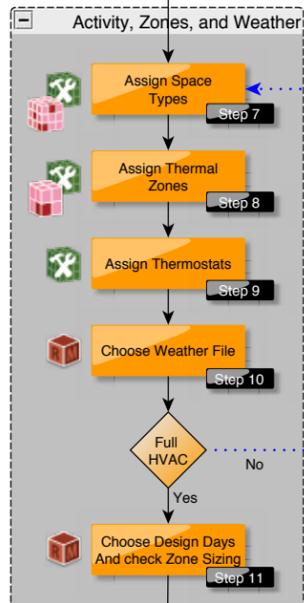
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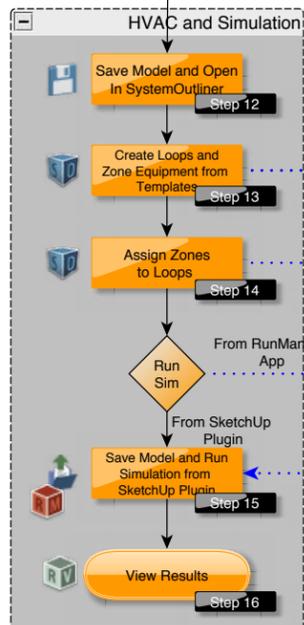
Watch Online Training Videos



Model from Photographs
Import From Cad File



Import IDF File (with loads removed)



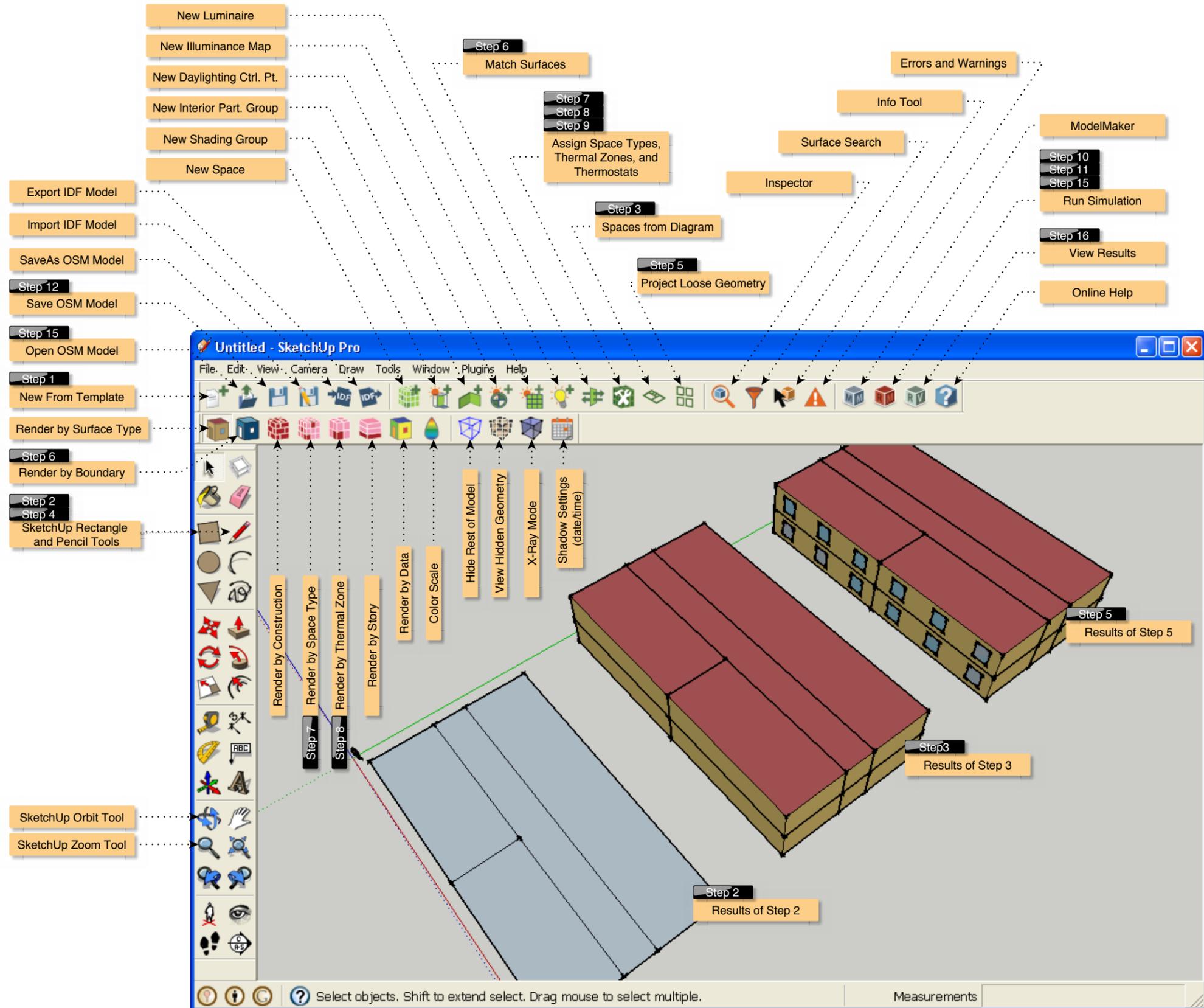
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Step 5 Results of Step 5

Step 3 Results of Step 3

Step 2 Results of Step 2